

Memorandum



Water Utilities Department

Date: July 19, 2001
To: Mayor and Council
From: Tom Gallier, Water Utilities Manager (350-2625) *TG*
Cc: Will Manley, City Manager
Patrick Flynn, Assistant City Manager
Subj: Water Utilities Rates and Development Fees

Summary and Recommendations

At the April 5, 2001 Council Work Study Session, staff presented results of the Water Utilities Integrated Master Plan, the recommended \$183 million six year capital improvement program (C.I.P.) necessary to implement the plan (see attached table on page 13), and a detailed analysis of rate and development fee impacts and recommendations. Council approved the C.I.P., but directed staff to further examine:

- Alternative approaches to allocating the cost recovery between customer rates and water and sewer development fees,
- Impacts of increasing development fees on economic growth and development,
- Legal/financial implications of granting development fee waivers, and,
- The appropriate level of the Water Fund unreserved cash balance.

Water Utilities, Financial Services, and City Attorney's Office staff have reviewed these issues and reached the following recommendations:

1. Allocate cost recovery based on the growth/non-growth ratio of the capital improvement program (\$88 million to growth, and \$95 million to non-growth).
2. The growth related component should be recovered by an increase in the water/sewer development fees of approximately 65%.
3. The non-growth related component should be recovered by annual increases in the monthly **total** water/sewer rates of approximately 2.5%.
4. The Water Fund unreserved cash balance should be maintained at an amount equal to 100% of the previous fiscal year revenues (currently about \$45 million). Excess funds should be used to increase cash funding of projects and reduce the need for bonded debt.
5. Waiving water and sewer development fees should be avoided, or reimbursed to the Water Fund by the General Fund.

Discussion

These recommendations would still leave Tempe with water and sewer development fees that are among the lowest in the Phoenix metropolitan area, and ensure that growth pays its fair share of the costs to increase system capacity. The increases should not have a significant impact on growth and development within the City. A table and attached graphs (pages 3 -7) illustrates the comparative impact of the recommended development fees for residential, 1 inch, 2 inch, and 3 inch water meters.

The recommended increases in water and sewer rates would be below the current urban consumer price index of 3.4%, and should allow Tempe to maintain its position as the lowest cost water and sewer provider in the Phoenix area. A table is attached (page 8) which illustrates the impact of these rate increases on a typical residential account over the next six years. A comparative Cost of Service table and graph (pages 2 and 10), including water and sewer fees, has been prepared by the Financial Services Department and includes all Valley cities.

Comparative examples of water/sewer fund balances are presented on page 11. Finally, the fiscal impact of all of these recommended adjustments and policies is summarized in the Operating Pro-Forma table, which can be found on page 9.

Requested Direction from Council

- Staff recommends an approximate 65% increase in water/sewer development fees to cover growth-related costs in the approved Capital Improvement Program (see schedule on page 12). Can staff move forward with the process to enact such development fee adjustments?
- Staff is recommending approximate annual 2.5% rate increases on the **total** water/sewer bills (see schedule on page 12). Can staff move forward with the rate adjustment process?
- Staff proposes that future rate adjustments be considered on a biennial basis, concurrent with consideration of biennial operating and capital Water Utilities Department budget requests (Example: adjustments for the FY 2001-2003 budget would become effective Nov. 1, 2001, and Nov. 1, 2002). Is this agreeable to Council?
- Staff recommends that water/sewer development fee waivers no longer be granted, unless the Water Fund receives reimbursement from the General Fund or other sources. Is this agreeable to Council?

Conclusions

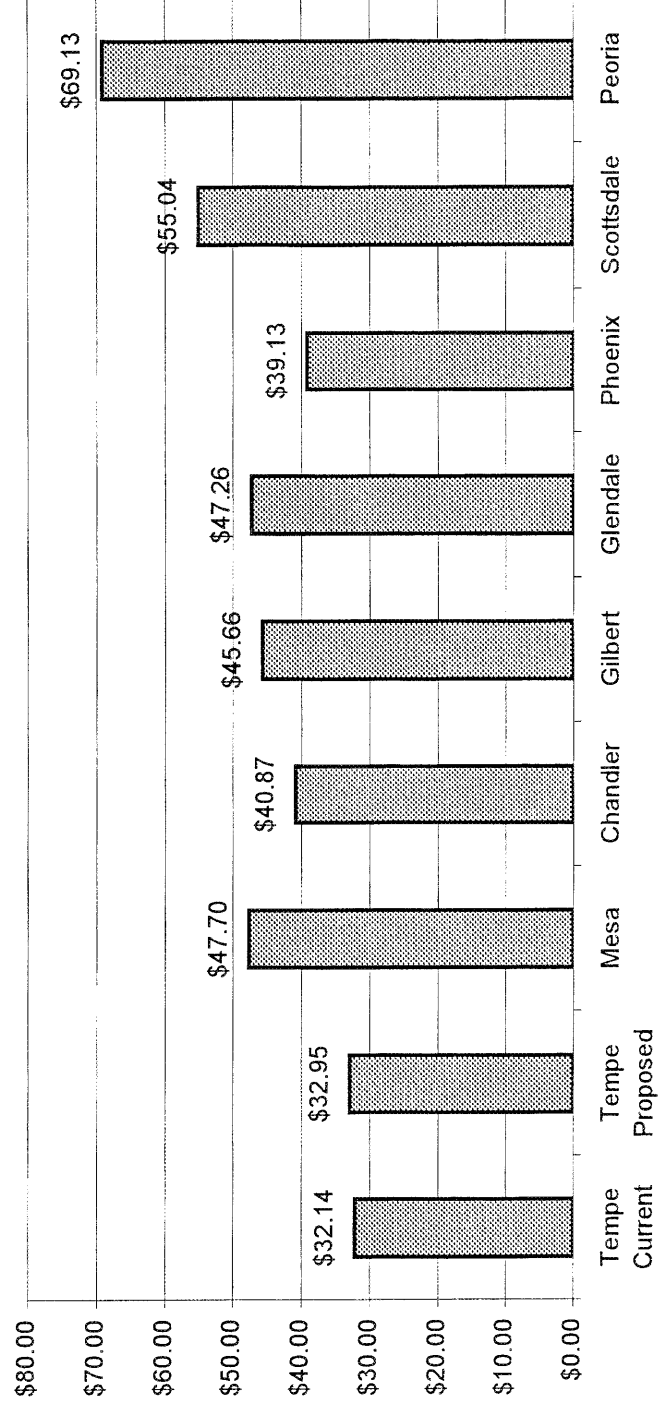
Staff believes this recommended financing plan and associated policy recommendations will allow the utility to maintain adequate financial reserves, establish an equitable distribution between growth and non-growth elements of the C.I.P., maintain competitive water and sewer development fees and rates, and avoid short-term rate spikes.

Water/Wastewater C.I.P. Funding Discussion Support Documents

Water/Wastewater C.I.P. Funding Discussion
Key Discussion Points

- Council has approved the \$183 million six-year C.I.P.
- The C.I.P. has growth (\$88 mill.) and non-growth (\$95 mill.) elements.
- Three alternatives to recover costs:
 - 100% to development fees (not recommended),
 - No development fee increase – increased cost shifted to rate payers (not recommended), and
 - Allocate equitably between development fees and rates (recommended).
- Staff recommends allocation as the most equitable and legally defensible approach.
- Recommended alternative with rate/dev. fee adjustments and fund balance reductions allows cash funding over 40% of the \$183 million C.I.P.
- Recommended Water Fund balance cap at \$45 - \$50 million.
- Growth component cost recovery results in average 65% increase in water/sewer development fees.
- Non-Growth component cost recovery results in annual total residential water/sewer rate adjustments at about \$0.82 (2.5%) per month.
- This plan assumes all projected Water/Sewer development fees will be collected, and that future waivers will be minimized.
- Initial rate/development fee adjustments should be in place by end of 2001, and will be reviewed every two-year budget cycle.
- Water/Sewer rates and development fees remain among the lowest in the Valley.

Residential Monthly Water and Sewer Fees

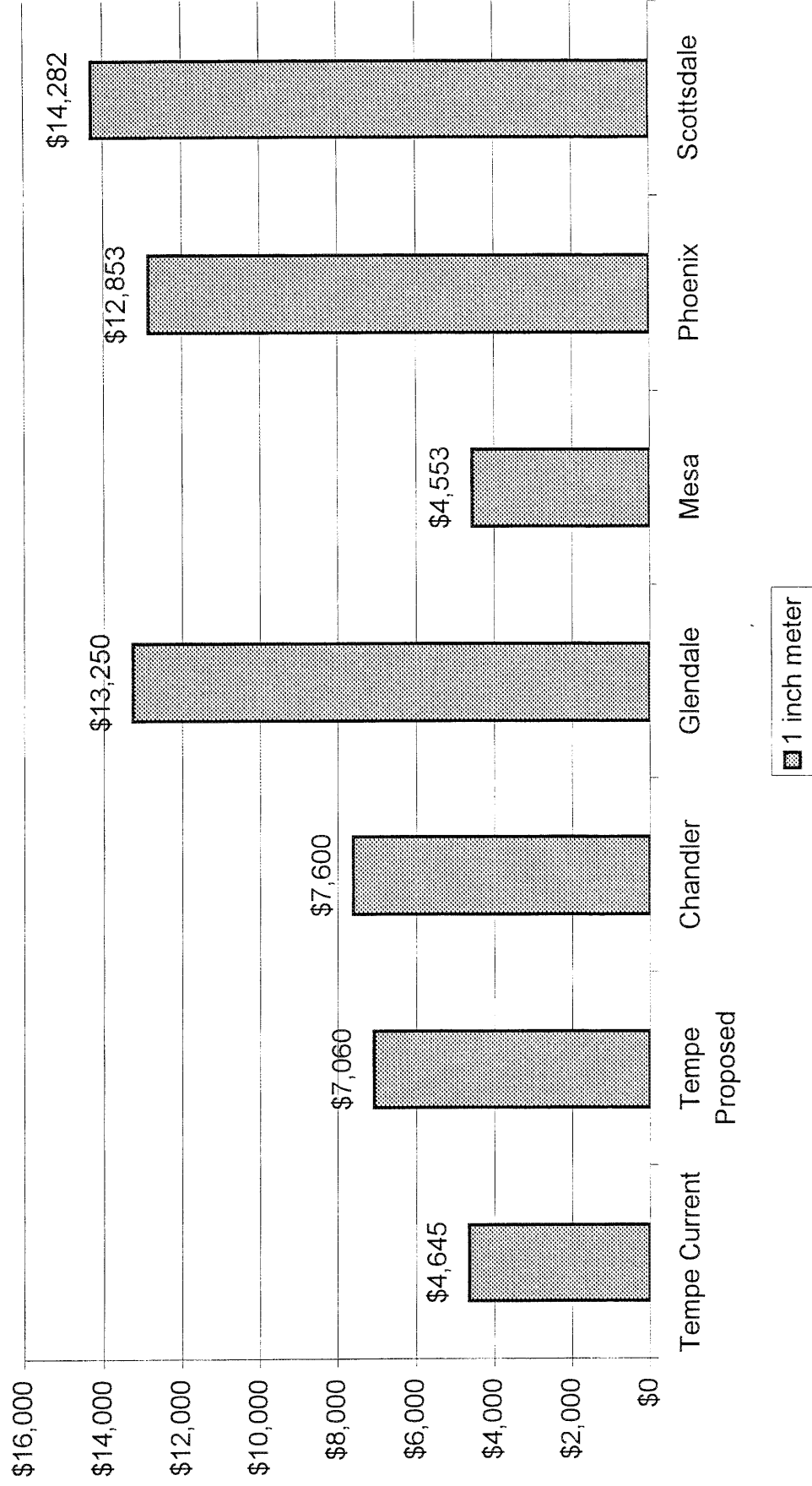


Source: Cost of Service Report, Financial Services Department, July 2001.
Assumes average monthly water consumption of 15,000 gallons.

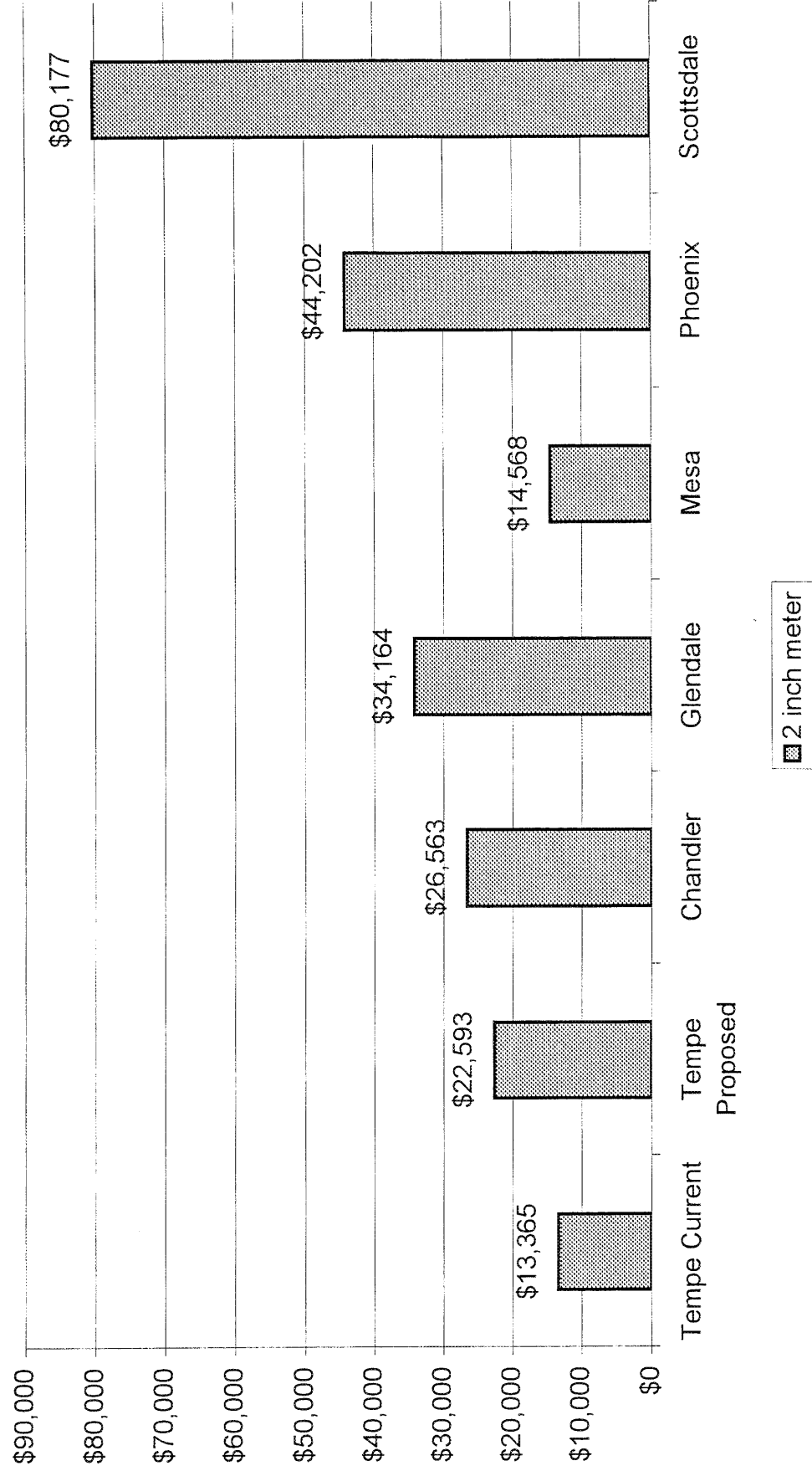
Residential Development Fees **Water & Wastewater Combined** (per dwelling unit)



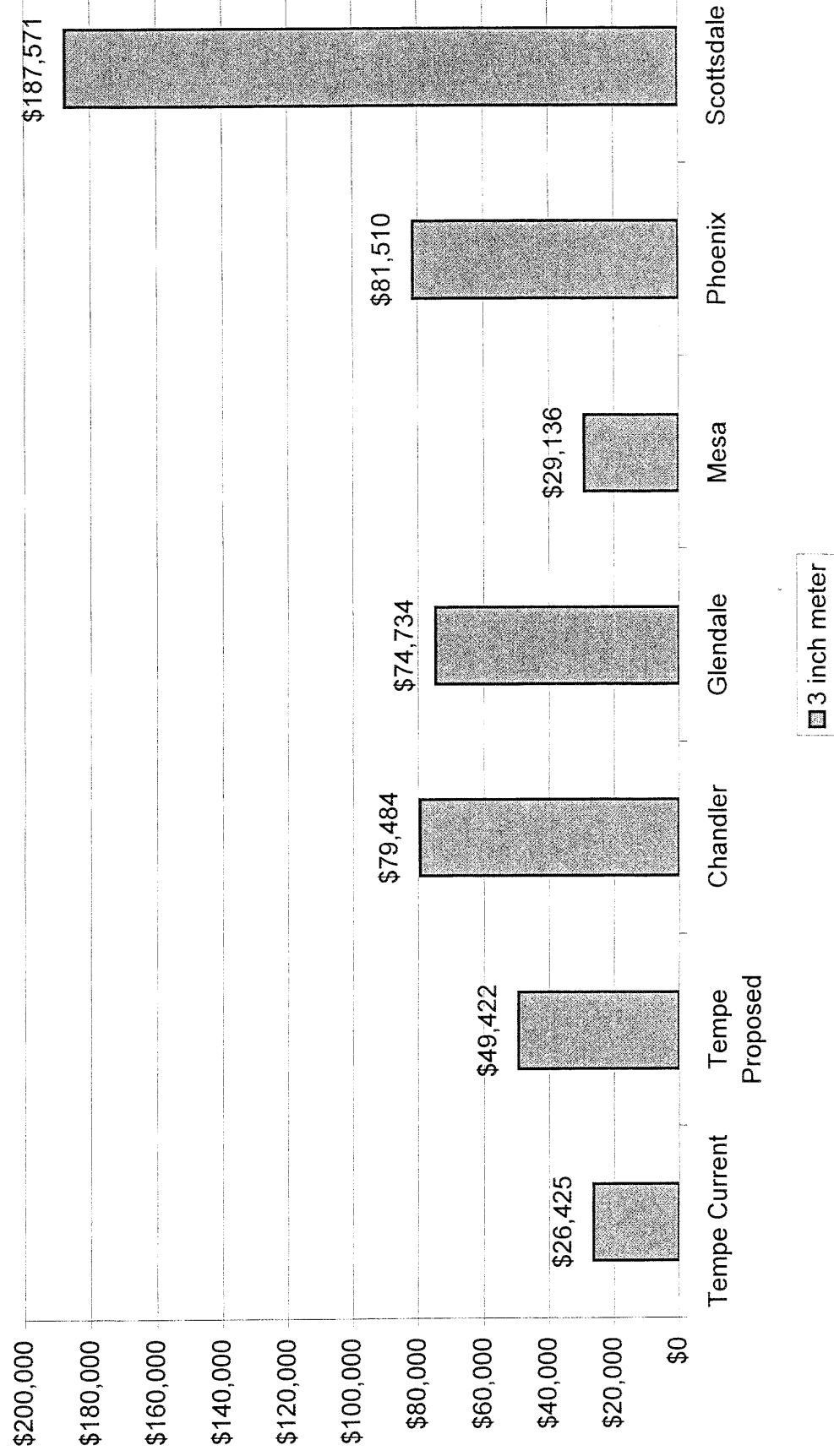
Development Fees - 1 inch meter **Water & Wastewater Combined** (equivalent to 2.5 dwelling units)



Development Fees - 2 inch meter **Water & Wastewater Combined** (equivalent to 8 dwelling units)



Development Fees - 3 inch meter **Water & Wastewater Combined** (equivalent to 17.5 dwelling units)



City of Tempe

Proposed Development Fees

Proposed Fees Based on Present Value of Total Growth Related Debt Service. Average Increase: 65%.

Customer Class	Tempe (current)			Tempe - Proposed		
	Water	Sewer	Total	Water	Sewer	Total
Residential						
Single Family	\$875	\$930	\$1,805	\$1,266	\$1,558	\$2,824
Multi-family	\$875	\$930	\$1,805	\$1,266	\$1,558	\$2,824
Commercial						
5/8 inch	\$875	\$930	\$1,805	\$1,266	\$1,558	\$2,824
3/4 inch	\$1,310	\$1,440	\$2,750	\$1,899	\$2,337	\$4,236
1 inch	\$2,100	\$2,545	\$4,645	\$3,166	\$3,895	\$7,060
1-1/2 inch	\$4,130	\$4,465	\$8,595	\$6,331	\$7,790	\$14,121
2 inch	\$6,395	\$6,970	\$13,365	\$10,130	\$12,463	\$22,593
3 inch	\$12,660	\$13,765	\$26,425	\$22,159	\$27,263	\$49,422
4 inch	\$20,990	\$22,830	\$43,820	\$37,986	\$46,737	\$84,724

Comparison to Other Cities:

Customer Class	Chandler			Glendale			Mesa			Phoenix			Scottsdale		
	Water	Sewer	Total	Water	Sewer	Total	Water	Sewer	Total	Water	Sewer	Total	Water	Sewer	Total
Residential															
Single Family	1,685	1,288	2,973	1,367	2,003	3,370	901	920	1,821	2,427	1,337	3,764	2,939	2,576	5,515
Multi-family	1,049	914	1,963	524	1,370	1,894	640	653	1,293	2,427	1,337	3,764	1,952	2,150	4,102
Commercial															
5/8 inch	1,685	1,288	2,973				901	920	1,821	2,427	1,337	3,764	947	3,821	4,767
3/4 inch	2,785	1,932	4,717	4,540	8,710	13,250	2,253	2,300	4,553	7,278	5,575	12,853	1,617	6,527	8,144
1 inch	4,382	3,218	7,600				4,505	4,600	9,105	15,323	11,637	26,960	2,836	11,446	14,282
1-1/2 inch	9,399	6,437	15,836				7,208	7,360	14,568	25,290	18,912	44,202	7,126	28,766	35,893
2 inch	16,263	10,300	26,563	11,664	22,500	34,164	14,416	14,720	29,136	45,623	35,887	81,510	15,919	64,258	80,177
3 inch	56,955	22,529	79,484	25,515	49,219	74,734	14,416	14,720	29,136	45,623	35,887	81,510	37,242	150,329	187,571
4 inch	71,820	32,186	104,006	43,740	84,375	128,115	22,525	23,000	45,525	95,083	72,262	167,345	54,987	221,956	276,943

**CITY OF TEMPE, ARIZONA
FINANCIAL MODEL
WATER / WASTEWATER FUND
Monthly Customer Impact**

DRAFT Recommended Alternative
Assumes ~65% increase in development fees in mid-2002.

Fiscal Year Ending:		2001	2002	2003	2004	2005	2006	2007
Single Family Residential								
<i>Summary</i>								
Total Monthly Water		\$ 20.35	\$ 20.75	\$ 21.17	\$ 21.59	\$ 22.02	\$ 22.46	\$ 22.90
Water - Percent Increase		0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Total Monthly Sewer		\$ 11.79	\$ 12.20	\$ 12.61	\$ 13.00	\$ 13.39	\$ 13.76	\$ 14.13
Sewer - Percent Increase		0.0%	3.5%	3.3%	3.1%	3.0%	2.8%	2.7%
Total Monthly W/WW Bill		\$ 32.14	\$ 32.95	\$ 33.77	\$ 34.59	\$ 35.40	\$ 36.22	\$ 37.04
Nominal Dollar Increase		\$ -	\$ 0.81	\$ 0.82	\$ 0.82	\$ 0.81	\$ 0.82	\$ 0.82
Percent Increase (%)		0.0%	2.53%	2.48%	2.42%	2.36%	2.31%	2.26%

* Assumes average monthly water consumption of 15,000 gallons.

* Note: Current CPI = 3.4% (Source: Arizona's Economy, University of Arizona)

CITY OF TEMPE, ARIZONA
FINANCIAL MODEL
WATER / WASTEWATER FUND
OPERATING PRO-FORMA

DRAFT **Recommended Alternative**

Assumes ~65% increase in development fees in mid-2002.
 Projected Fund Balance restricted to \$45 - \$50 million.

Fiscal Year Ending:

	2002	2003	2004	2005	2006	2007
REVENUE						
<i>Water Operating Revenues</i>	\$ 25,136,422	\$ 25,959,640	\$ 26,809,818	\$ 27,687,839	\$ 28,594,616	\$ 29,531,090
<i>Wastewater Operating Revenues</i>	\$ 15,877,958	\$ 16,473,870	\$ 17,068,383	\$ 17,659,870	\$ 18,251,785	\$ 18,842,605
<i>Irrigation Operating Revenues</i>	\$ 268,859	\$ 268,859	\$ 268,859	\$ 268,859	\$ 268,859	\$ 268,859
<i>Interest Revenue</i>	\$ 3,631,507	\$ 3,364,008	\$ 2,780,322	\$ 2,418,137	\$ 2,298,998	\$ 2,282,260
<i>Miscellaneous Revenue</i>	\$ 1,932,811	\$ 1,932,811	\$ 1,932,811	\$ 1,932,811	\$ 1,932,811	\$ 1,932,811
<i>Development Fee Revenue</i>	\$ 2,199,500	\$ 2,739,000	\$ 2,739,000	\$ 2,739,000	\$ 2,739,000	\$ 2,739,000
TOTAL REVENUE	\$ 49,047,056	\$ 50,738,187	\$ 51,599,192	\$ 52,706,516	\$ 54,086,069	\$ 55,596,625

OPERATING EXPENSES

<i>Operating Expenses</i>						
Salaries and Wages	\$ 7,020,100	\$ 7,441,300	\$ 7,887,800	\$ 8,361,100	\$ 8,862,800	\$ 9,305,940
Fringe Benefits	\$ 1,645,300	\$ 1,792,300	\$ 1,959,200	\$ 2,178,600	\$ 2,420,400	\$ 2,541,420
Materials and Supplies	\$ 2,518,800	\$ 2,615,800	\$ 2,717,900	\$ 2,825,300	\$ 2,938,300	\$ 2,997,066
Fees and Services	\$ 5,919,700	\$ 6,167,000	\$ 6,428,000	\$ 6,703,200	\$ 6,996,100	\$ 7,136,022
Wastewater Plant - 91st Avenue	\$ 3,640,000	\$ 3,785,600	\$ 3,937,024	\$ 4,094,505	\$ 4,258,285	\$ 4,428,617
Net Loss from Joint Venture	\$ 2,090,000	\$ 1,980,000	\$ 1,870,000	\$ 1,760,000	\$ 1,650,000	\$ 1,540,000
Depreciation	\$ 9,183,757	\$ 10,624,949	\$ 12,282,356	\$ 13,196,469	\$ 13,840,786	\$ 14,314,865
Interest Expense	\$ 3,985,596	\$ 4,368,105	\$ 5,662,933	\$ 6,379,846	\$ 6,884,682	\$ 7,900,509
Contingency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Internal Services	\$ 4,295,402	\$ 4,572,420	\$ 4,869,017	\$ 5,186,717	\$ 5,527,142	\$ 5,637,685
TOTAL OPERATING EXPENSES	\$ 40,298,655	\$ 43,347,473	\$ 47,614,230	\$ 50,685,737	\$ 53,378,495	\$ 55,802,123

NET EXCESS (DEFICIT)	\$ 8,748,402	\$ 7,390,714	\$ 3,984,963	\$ 2,020,780	\$ 707,574	\$ (205,499)
-----------------------------	--------------	--------------	--------------	--------------	------------	--------------

Pay as you go Financing	\$ (13,966,000)	\$ (23,348,313)	\$ (16,656,688)	\$ (11,989,375)	\$ (8,680,000)	\$ (7,344,688)
CIP cash flow adjustment*	\$ (27,481)	\$ 4,512,782	\$ 5,570,067	\$ 7,632,528	\$ 7,644,236	\$ 7,580,857

PROJECTED FUND BALANCE**	\$ 65,960,935	\$ 54,516,118	\$ 47,414,459	\$ 45,078,391	\$ 44,750,201	\$ 44,780,872
---------------------------------	---------------	---------------	---------------	---------------	---------------	---------------

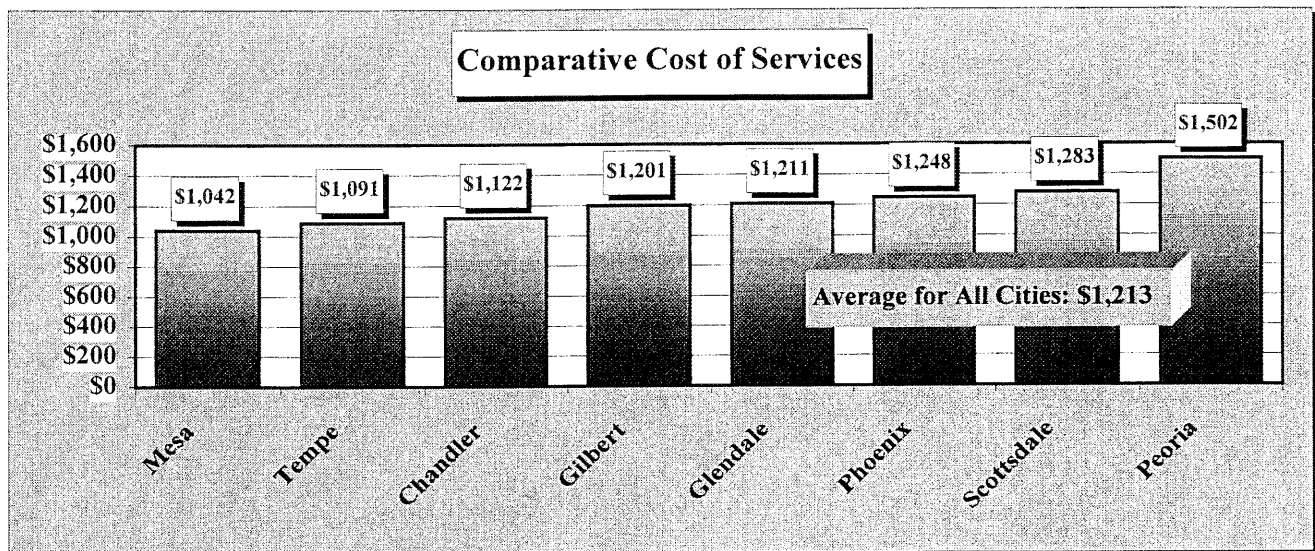
* Depreciation less Principal

** Projected Available Cash

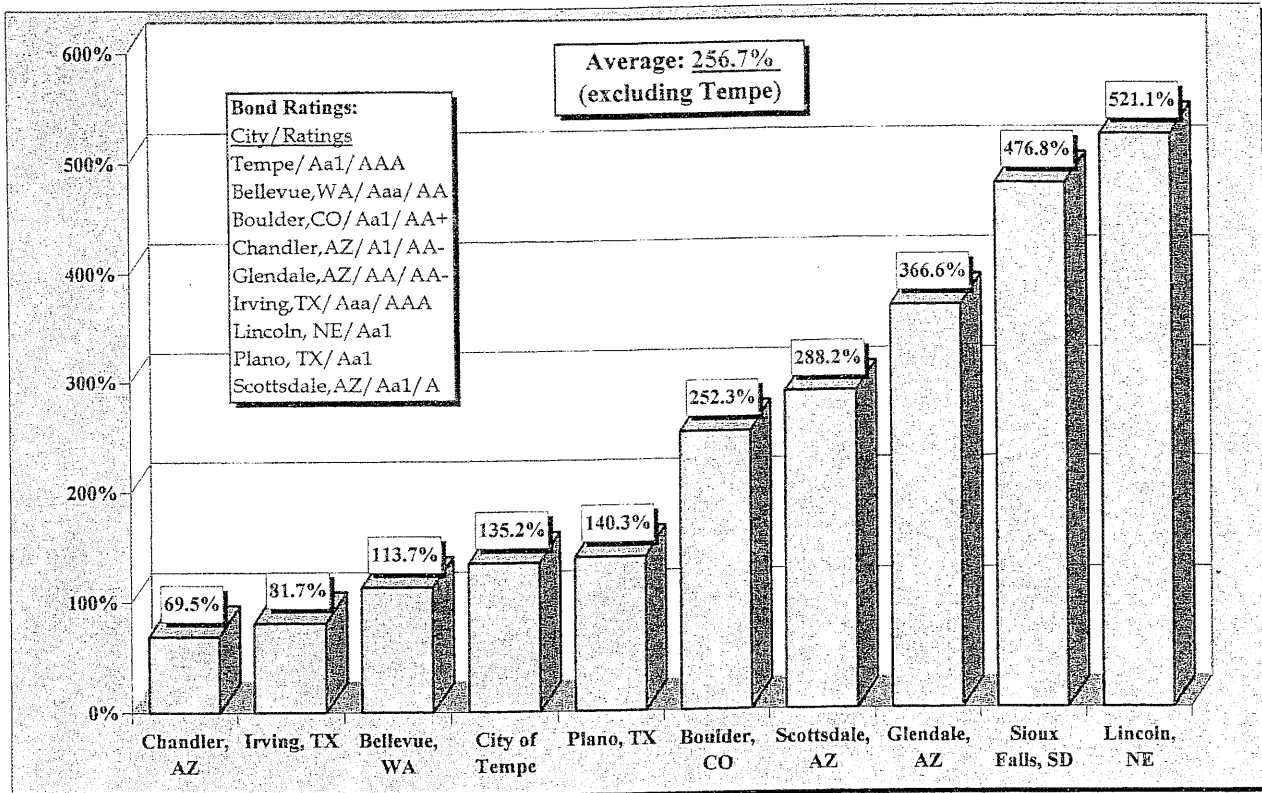
COMPARATIVE COST OF SERVICES REPORT

As of July 1, 2001

	Property Tax	Sales Tax	Sanitation	Water	Sewer	Other	Total
MESA							
Rate	0	1.50%	\$15.25	\$32.29	\$15.41		
Annual Cost	0	\$286.88	\$183.00	\$387.48	\$184.95		\$1,042.31
TEMPE							
Rate	\$1.35	1.80%	\$11.75	\$20.35	\$11.79		
Annual Cost	\$151.46	\$413.08	\$141.00	\$244.17	\$141.52		\$1,091.23
CHANDLER							
Rate	\$1.29	1.50%	\$11.90	\$26.61	\$14.26		
Annual Cost	\$144.73	\$344.24	\$142.80	\$319.32	\$171.12		\$1,122.21
GILBERT							
Rate	\$1.25	1.50%	\$14.05	\$23.45	\$22.21		
Annual Cost	\$140.24	\$344.24	\$168.60	\$281.40	\$266.49		\$1,200.97
GLENDALE							
Rate	\$1.72	1.30%	\$12.75	\$27.26	\$20.00		
Annual Cost	\$192.97	\$298.34	\$153.00	\$327.12	\$240.00		\$1,211.43
PHOENIX							
Rate	\$1.82	1.80%	\$19.20	\$23.05	\$14.47	\$1.60	
Annual Cost	\$204.19	\$344.25	\$230.40	\$276.60	\$173.66	\$19.25	\$1,248.35
SCOTTSDALE							
Rate	\$1.15	1.40%	\$14.07	\$35.77	\$15.39	\$4.16	
Annual Cost	\$129.02	\$321.29	\$168.84	\$429.27	\$184.67	\$49.97	\$1,283.06
PEORIA							
Rate	\$1.59	1.50%	\$12.49	\$46.27	\$22.86		
Annual Cost	\$178.39	\$344.24	\$149.88	\$555.24	\$274.32		\$1,502.07



Comparative Benchmark Illustration
Fund Balance Coverage¹
Water-Wastewater Fund
FY 1999-00



Benchmark/GFO	Wastewater Fund Revenue	Unreserved Retained Earnings	Fund Balance Coverage
A Award City			
Chandler, AZ	46,945,746	32,627,777	69.5%
Irving, TX	52,565,781	42,952,020	81.7%
Bellevue, WA	45,045,000	51,226,000	113.7%
City of Tempe	41,727,746	56,434,920	135.2%
Plano, TX	60,100,870	84,293,645	140.3%
Boulder, CO	22,238,000	56,099,000	252.3%
Scottsdale, AZ	83,305,000	240,053,000	288.2%
Glendale, AZ	48,330,693	177,194,102	366.6%
Sioux Falls, SD	20,580,978	98,130,140	476.8%
Lincoln, NE	33,167,456	172,850,885	521.1%

¹ Fund Balance Coverage is defined as Unreserved, Undesignated Retained Earnings divided by Water-Wastewater Fund revenue.
Sources for financial data: Comprehensive Annual Financial Reports

DRAFT – Schedule for Water/Wastewater Rate Adjustments

July 26, 2001	Council Issue Review Session – Review of proposed water/wastewater rates with City Council.
August 9, 2001	Supply written report of data supporting rate increase to the City Clerk (at least 30 days prior to the September 13, 2001 Public Hearing).
August 9, 2001	Adopt Notice of Intention to set time and date of the Public Hearing (at least 30 date prior to the Public Hearing).
August 23, 2001	Publish Notice of Intention in newspaper (not less than 20 days prior to the Public Hearing).
September 13, 2001	Hold Public Hearing and Adopt Rate Adjustments.
November 1, 2001	Effective date of rate adjustments (at least 30 days after the rate resolution is adopted).

DRAFT – Schedule for Water/Wastewater Development Fee Adjustments

July 26, 2001	Council Issue Review Session – Review of proposed water/wastewater rates with City Council.
August 9, 2001	Supply written report of data supporting fee increase to the City Clerk (at least 30 days prior to the September 13, 2001 Public Hearing).
August 9, 2001	Adopt Notice of Intention to set time and date of the Public Hearing (at least 30 days prior to the Public Hearing).
September 13, 2001	Hold Public Hearing.
October 11, 2001	Adopt Development Fees (at least 14 days after Public Hearing).
January 11, 2001	Effective date of adjusted development fees (at least 90 days after the fee resolution is adopted).

WUD - Capital Improvement Program, FY 2002-2007

**Partnered projects reflect actual Tempe share														
Allocation Ratios			Item								Tempe		Partner	
Regrs	Rehab	Growth	#	Description	FY 2001/02	FY 2002/03	FY 2003/04	FY 2004/05	FY 2005/06	FY 2006/07	Total	Total	T	
0	1	0	W1	System: New Production Wells (5 Wells/19.3 MGD)	1,660,000	1,325,000	475,000	0	0	0	3,460,000		3	
0	1	0	W2	System: Kyrene Booster Zone	255,000	185,000	0	0	0	0	440,000		42	
0.05	0	0.95	W3	JGMMWTF: Plant Expansion (30 MGD) ¹	0	3,127,500	6,480,000	8,892,500	2,550,000	0	21,050,000	21,050,000	5	
0.05	0.25	0.7	W4	JGMMWTF: Waterline Improvements ¹	300,625	410,313	1,304,063	2,559,375	0	0	4,574,375	1,055,625	2	
0.05	0	0.95	W5	STWTF: Plant/Facility Expansion (20 MGD)	0	0	0	0	1,280,000	1,220,000	2,500,000		2	
0	0	1	W6	System: Chandler Delivery Connection (15 MGD) ²	0	0	0	0	0	0	0	2,320,000	2	
0	1	0	W7	System: Alameda Waterline Replacement	250,000	0	0	0	0	0	250,000		3	
0.33	0.34	0.33	W8	Division: Update IMP	0	0	300,000	0	0	0	600,000		3	
0	1	0	W9	JGMMWTF: Replace Pre-seed Flights	150,000	150,000	0	0	0	0	300,000		1	
0	1	0	W10	JGMMWTF: Re-hab Existing Filters	0	3,000,000	0	0	0	0	3,000,000		1	
0	1	0	W11	JGMMWTF: Capital Equipment Replacement	150,000	150,000	150,000	150,000	150,000	150,000	900,000		3	
0	1	0	W12	STWTF: Capital Equipment Replacement	150,000	150,000	150,000	150,000	150,000	150,000	900,000		1	
0	1	0	W13	System: Compound Meter Replacement	350,000	350,000	350,000	0	0	0	1,050,000		3	
0	1	0	W14	System: Automated Meter Reading	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000		1	
0	1	0	W15	System: Distribution System Fittings	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000		2	
0	1	0	W16	System: Waterline Upgrades & Extensions	0	400,000	400,000	400,000	400,000	400,000	2,000,000		1	
0	1	0	W17	System: Automation Improvements	0	0	250,000	250,000	0	0	500,000		1	
0	1	0	W18	System: CAP Capital Charge	199,000	199,000	199,000	199,000	199,000	199,000	1,194,000		1	
0	1	0	W19	System: Elevated Tank Rehabilitation	500,000	0	0	0	0	0	500,000		1	
Water Projects Subtotal					\$4,714,625	\$10,196,813	\$10,808,063	\$13,350,875	\$5,479,000	\$3,169,000	\$47,718,375	\$24,425,625	\$72	
0.2	0	0.8	WW1	91st Avenue: Plant Expansion IVA (4.5 MGD)	2,400,000	6,200,000	15,300,000	3,800,000	0	0	27,700,000		27	
0.2	0	0.8	WW2	91st Avenue: Plant Expansion IVB (3.5 MGD)	0	0	0	0	3,379,750	0	8,449,375		8	
0.675	0.313	0.012	WW3	91st Avenue: CIP Excluding Expansions	7,604,000	8,508,000	5,000,000	5,000,000	5,000,000	5,000,000	36,112,000		36	
0	0.5	0.5	WW4	System: New Transmission to 91st Ave.	0	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	22,400,000		22	
0.2	0.2	0.6	WW5	Kyrene WRF: Plant Expansion & Re-hab. (5 MGD + 5 MGD)	1,600,000	4,905,000	5,625,000	2,300,000	6,570,000	4,000,000	25,000,000		25	
0	0	1	WW6	System: 1st Street 15" FarmerMill	147,000	191,000	0	0	0	0	338,000		1	
0	0	1	WW7	System: Farmer Ave. 12" Sewer 1st Street to 7th Street	0	356,000	0	0	0	0	356,000		1	
0	0.75	0.25	WW8	System: SAI Rehabilitation - All Phases ³	429,375	2,013,000	2,174,625	743,125	1,114,688	1,114,688	7,589,500	7,589,500	15	
0	0	1	WW9	System: Kyrene Influent Rural Rd.	0	0	461,000	2,497,000	0	0	2,958,000		2	
0	0	1	WW10	System: Rural Rd. 36"/21" Bell De Mar	0	0	162,000	0	0	0	162,000		1	
0	0	1	WW11	System: Carver 15" - Tait Parcel	0	0	0	0	1,000,000	0	1,000,000		1	
0	1	0	WW12	System: SAI Diversion Structure ³	750,000	0	0	0	0	0	750,000	750,000	1	
0	1	0	WW13	Kyrene WRF: Reliability Upgrades	420,000	580,000	0	0	0	0	1,000,000		1	
0	1	0	WW14	Carver-Rural LS: Pump Replacement	100,000	100,000	0	0	0	0	200,000		1	
0	1	0	WW15	System: Sewerline Upgrades & Extensions	0	250,000	250,000	250,000	250,000	250,000	1,250,000		1	
Wastewater Projects Subtotal					\$13,450,375	\$27,583,000	\$33,452,625	\$19,070,125	\$21,794,438	\$19,914,313	\$135,264,875	\$8,339,500	\$143	
Total Annual WMD CIP					\$18,165,000	\$37,779,813	\$44,260,688	\$32,421,000	\$27,273,438	\$23,083,313	\$182,983,250	\$32,765,125	\$215	
Cash Funded CIP					\$13,966,000	\$23,348,313	\$16,656,688	\$11,989,375	\$8,680,000	\$7,344,688	\$81,985,064			
Financed CIP					\$4,199,000	\$14,431,500	\$27,604,000	\$20,431,625	\$18,593,438	\$15,738,625	\$100,998,186			
Total					\$18,165,000	\$37,779,813	\$44,260,688	\$32,421,000	\$27,273,438	\$23,083,313	\$182,983,250			